Application No.: 10/534,885

IN THE CLAIMS:

Please amend claims as follows

- 1-12 canceled
- 13. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1 for the application of an acidic or basic pharmaceutically active substance for the treatment of diseases in humans and mammals.
- 14. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1 for the inhalative (pulmonary) application of an acidic or basic active substance.
- 15. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1, wherein the pharmaceutically active substance is a prostanoid.
- 16. (withdrawn) A method of use of biodegradable colloidal particles according to claim 1 for the treatment of pulmonary hypertension.
- 17. (withdrawn) A method of use according to claim 1, wherein the biodegradable colloidal particles are available in a physiologically compatible agueous solution
- 18-25, canceled
- (currently amended) Biodegradable colloidal particles according to claim [[25]] 36, wherein the pharmaceutically active substance is a prostanoid.
- 27. (currently amended) Biodegradable colloidal particles according to claim [[25]] 36, wherein the pharmaceutically active substance is a synthetic analog of prostacyclin.

Application No.: 10/534,885

28. (currently amended) Biodegradable colloidal particles according to claim [[25]] 36, wherein the proportion of hydrophobic side chains in relation to hydroxyl functions of the backbone lies between 20% and 80%.

- 29. (currently amended) Biodegradable colloidal particles according to claim [[25]] 36, wherein the proportion of side chains carrying amino functions in relation to hydroxyl functions of the backbone lies between 2% and 35%, and is particularly preferred to be between 10% and 25%
- 30. (currently amended) Biodegradable colloidal particles according to claim [[25]] 36, wherein the amino groups of the comb polymer are at least partly quaternized by the addition of an organic acid, while the corresponding negatively charged organic base of said organic acid stabilizes the related colloidal particles of such a comb polymer.
- 31. (currently amended) Biodegradable colloidal particles according to claim [[25]] 36, wherein the zeta potential of a colloidal solution of the particles lies between -5 and -80 mV or between +5 and +80 mV
- 32. (currently amended) Biodegradable colloidal particles according to claim [[25]] <u>36</u>, wherein the organic acid is a prostanoid and the zeta potential of a colloidal solution of the particles lies between -10 and -50 mV or between +10 and +50 mV.
- 33. (previously presented) Biodegradable colloidal particles according to claim 28, wherein the proportion of hydrophobic side chains in relation to hydroxyl functions of the backbone lies between 40% and 70%.
- 34. (previously presented) Biodegradable colloidal particles according to claim 29, wherein the proportion of side chains carrying amino functions in relation to hydroxyl functions of the backbone lies between 10% and 25%.

- 35. (currently amended) Method for the production of biodegradable colloidal particles according to claim [[25]] 36 encompassing the following steps for production:
 - a) dissolution of the comb polymer in a water-miscible, volatile organic solvent and
 - addition of the solution obtained in a) to an isotonic aqueous solution with a pH value between 6.0 and 8.0 comprising, along with a sugar and a buffer, an organic acid, which can be a Lewis or Brønsted acid, or the corresponding base thereof, which can be a Lewis or Brønsted base,
 - c) stirring of the solution obtained in (b) for the production of colloidal particles and
 - d) removal of the organic solvent.
- 36. (new) Biodegradable colloidal particles comprising
- a) amphiphilic comb polymers comprising a water-soluble polyol backbone, hydrophobic side chains and side chains carrying amino groups, consisting of the formula,

wherein

 $P \qquad \text{is a polyvinyl alcohol with 300 hydroxyl groups } [n_{oh} = 300] \\$ wherein, relating to the number of the free hydroxyl functions n_{oh} of the polyvinyl

backbone,

a is chosen in a way that the side chains carrying amino groups possess a

percentage of 0.5% to 50%

b is chosen in a way that the hydrophobic side chains possess a percentage of 1 % to 90 %

m can be an integer between 1 and 100, and

b) a combination of CMC and one or more pharmaceutically active substance as a stabilizer, wherein the pharmaceutically active substance is a carboxylic acid, sulphonic acid or phosphoric acid, and wherein the acid groups of the stabilizer are in excess or in deficiency in relation to the amino groups of the comb polymer, so that a colloidal solution of the particles features a positive or negative zeta potential,

wherein the biodegradable colloidal particles are stable in size when nebulized.